

1/18/69
28 April 69

23 April 1964

MEMORANDUM FOR RECORD

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SUBJECT: Evaluation of the [] Model LB-46
Microscope Base

REFERENCE: Memorandum for Chief, P&DS, NPIC, same subject,
dated 17 February 1964, from Chief, CIA/PID (NPIC)

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1. This MFR is a rebuttal to the statements, in the referenced memorandum, which I feel to be inaccurate or to be unfair comparisons. Paragraph 1 of the reference states "[] Model LB-46 microscope base has been tested by PID PI's to determine its acceptability in place of the Bausch & Lomb bases ordered by PID..." (Underscore by the undersigned).

Reference

Comment

Para 1 b (1) "base is too high, making viewing 'awkward'." The B & L light base stage is about 3 inches high; the LB-46 stage is about 3 3/4 inches high. The 3/4 inch increased height is part of the price that is paid for the "more even illumination" and is due to the size of the high voltage transformer. A major redesign would be required to either make a smaller transformer, if feasible, or to change the width and depth of the light base to permit relocation of the transformer.

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Para 1 b (2) "support column in a poor position." [] placed the column to one side so the user would be able to scan the film being viewed by moving the microscope in the X and Y directions. [] is changing the location of the support column to meet the requirements of PAG and undoubtedly would have done so for PID if PID had been really interested.

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Declass Review by NIMA/DOD

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Para 1 b (3) "fixed viewing stage." This is hardly a fair comparison "...to determine its acceptability in place of the Bausch and Lomb..." because the B & L's viewing stage is also fixed.

Para 1 b (4) "difficulty in changing height of microscope and danger of slipping on support column." This statement appears to be self-contradictory. If it is so difficult to change the height why would there be a "danger of slipping on support column"? When I suggested that the "danger of slipping" could be minimized by the use of a sleeve and 25X1 clamping ring, both of which are used by [] on their M-5 microscope, I was told that there was not enough time to wait for these changes.

Para 2 "Conclusions." At the time the LB-46 was given to PID for evaluation, they were told that the 25X1 B & L light bases would not arrive at the []

25X1 [] for another three weeks. I also told
25X1 them that [] (Vice President,
25X1 []) had stated that he could deliver the necessary number of LB-46's in less than three weeks and, on this contract, would deliver the LB-46's at the same price as the B & L light bases. The three weeks would have been ample time to make the sleeves and clamping rings. Since the LB-46's had not been fabricated at that time, changing the location of the column to the rear center would not have been difficult. This is being
25X1 done for the LB-46's now on order by PAG.

Para 3 "Recommendations: That the [] base be redesigned with the following considerations:

Para (a) "Height of the base be reduced." As stated above, this would require a major redesign. The B & L light base might also be better if it were to be given a major redesign.

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Para's (b) and (c) As stated above, these changes would not have been too difficult nor would they have required a significant amount of time.

Para (d) Dividing the viewing stage in half would require a major redesign. This should not be used in a comparison with the B & L light base which also has a single viewing stage.

Para (e) This is not part of the B & L light base and, therefore, should not be used in the comparison.

Para (f) The illumination (or luminosity) of the LB-46 was not only more even but was slightly higher than the B & L light base. The new production model of the LB-46 will emit about 40% more light than the old model (1400 ft-L. instead of 1000 ft-L). Another model of the LB-46 will emit about 2100 ft-L.

Para 4 25X1 [] started the design of the LB-46 in August 1962, in conjunction with the Bausch & Lomb Optical Company, as a replacement for the B & L light base. [] has since manufactured and sold a number of the LB-46's as shelf items. Therefore, the LB-46 could hardly be considered a prototype.

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2. If PID has specific requirements for a piece of PI equipment they should make those requirements known to P&DS in writing as a staff study. It appears from the referenced memorandum that what PID wants is an entirely new device having little resemblance to either the [] or the B & L light bases.

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Development Branch, P&DS